Factors influencing skills development and training pathways among local tailors in Kalulushi District, Zambia: A quantitative study

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ABSTRACT

The tailoring industry in Zambia plays a significant role in providing employment and meeting clothing needs, particularly in urban districts such as Kalulushi on the Copperbelt. However, concerns have been raised about garment construction quality, particularly men's shirt collars. Methods: This quantitative study investigated the skills development pathways and training mechanisms among local tailors in Kalulushi District, with a specific focus on how these factors influence the quality of men's shirt collar construction. The study used a descriptive research design and collected data from 50 local tailors using a structured questionnaire. The sample was selected through simple random sampling from an estimated population of 110 tailors. Data were analysed using SPSS (Statistical Package for the Social Sciences) and Microsoft Excel, with descriptive statistics, including frequencies, percentages, means, and standard deviations, computed for all variables. Results: The findings revealed that most respondents (68%) were male, with 40% having 1-3 years of experience and 56% having only a Grade 9 education. Notably, 64% of respondents disagreed that tailoring requires formal technical training at a skills training centre (mean=2.36, SD=0.92), while 80% agreed that tailors learn their craft through family members or informal apprenticeships (mean=4.12, SD=0.86). Chi-square analysis revealed no significant association between years of experience and rejection of formal training (χ^2=3.45, df=6, p=0.75). Conclusion: The study concludes that tailoring skills development in Kalulushi is predominantly informal, transmitted through family lineages and master-apprentice relationships rather than formal technical education. This informal training system, while culturally embedded and accessible, may contribute to inconsistent quality outcomes in specialised areas such as men's shirt collar construction. Recommendations include establishing structured continuing professional development programmes, creating cooperative resource banks for pattern drafting, and integrating informal training mechanisms with formal technical education pathways. The study recommends that the Technical and Vocational Education and Training Authority (TEVETA) should develop structured continuing professional development programmes specifically targeting informal tailors, delivered in accessible locations with flexible scheduling and recognition of prior learning.

Keywords: Informal Apprenticeship; Kalulushi District; Men's Shirt Collar Construction; Tailoring Skills Development; Technical Training; Zambia

I. INTRODUCTION

The garment construction industry represents a significant source of employment and economic activity in Zambia, with local tailors serving as primary providers of clothing for many households, particularly in urban and peri-urban areas (Zambia Statistics Agency, 2022). Kalulushi District in the Copperbelt Province is home to an estimated 110 local tailors who operate primarily in marketplaces and small workshops. Despite tailoring's prevalence, concerns have been raised about garment quality, particularly in specialised areas such as men's shirt collar construction.

Collars are an important part of a garment because they frame the face. A collar adds a fashionable finishing touch to many garments, especially men's shirts. Collar styles and shapes vary by type and by season. Because the face is the focal point, a collar's styling and placement matter for both the wearer and the garment (Kim & Kim, 2014). Collars may have square or pointed corners or rounded edges and can be cut as a single piece, in two pieces, or as part of the garment body. Some collars lie flat, some fold close to the neckline, and others stand up. Whatever the style, a collar must frame the wearer's face, lying smoothly around the neckline, free of pulls, ripples, or wrinkles.

Globally, garment construction is a technical accomplishment that requires knowledge and skills in basic sewing techniques, stitch applications, seams, darts, gathers, pleats, and edge finishing. Although patterns are made to standard measurements and bought according to size, they must be carefully checked and, if necessary, altered to accommodate individual differences in proportions. Accuracy matters most not only in the preliminary steps but in everything that follows, especially when placing the pattern on the fabric, cutting out the dress, and transferring the pattern markings to the fabric (Nordas, 2004).

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Zambia ranks among the countries with the highest levels of global poverty and inequality. According to the Zambia Statistics Agency (2022), poverty reached 60% of the population in 2022, up from 54.4% in 2015, worsened by limited job creation and declining labour earnings. Zambia is one of the world's youngest countries by median age, with 80% of the population under 35 (Zambia Statistics Agency, 2022). Youths face increasing challenges in finding meaningful, lucrative, and sustainable employment (Tools for Self-Reliance, 2025). A comprehensive assessment in the Ndola area showed that a lack of skills training significantly limits young people's ability to access jobs, health care, and other social services, with young women feeling these challenges most keenly.

In response, the Zambian government has taken steps to strengthen the technical and vocational education and training (TVET) sector. The Ministry of Labour and Social Security has strengthened labour market institutions by enacting the Zambia Institute of Human Resource Management Act No. 3 of 2022, revising statutory minimum wages, amending the National Pension Scheme Act No. 40 of 1996, and developing the Occupational Safety and Health Policy (Ministry of Labour and Social Security, Zambia, 2024). Furthermore, the government has rehabilitated district labour offices, improved integrated labour inspections, and developed a Frequently Asked Questions guide to provide useful labour-related information to the public. Recent initiatives such as the Noah Mapalo Skills Training Centre in Mtendere township, which opened in August 2024, demonstrate grassroots efforts to address skills gaps. The centre began with 10 participants, offering tailoring training for a minimal fee of K200 per month, which covers machine maintenance costs and small allowances for trainers. The centre aims to expand to include other skills such as carpentry, nutrition and baking, becoming a comprehensive hub for empowerment.

Despite the availability of information on collar construction techniques and recent government and NGO initiatives to promote skills development, tailors in Kalulushi continue to produce men's shirts with incorrect collar construction, resulting in garments that either have sloppy collars distorting facial appearance or sagging collars that are loose and make it difficult to wear a necktie. These quality concerns point to underlying issues in skills development and training pathways among local tailors. The persistence of poor-quality outcomes suggests that current training mechanisms may be inadequate to transmit the specialised knowledge required for high-quality collar construction. This study therefore investigated the mechanisms of skills development, training sources, and educational backgrounds of local tailors in Kalulushi District.

The study sought to answer the following research questions: First, how do local tailors in Kalulushi District develop their tailoring skills? Second, what are the primary sources of skills acquisition among local tailors? Third, what is the level of formal education among local tailors, and how does it relate to skills development? Moreover, to what extent do current training mechanisms equip tailors with the skills needed for quality collar construction?

This study is significant for several reasons. It contributes to the limited empirical literature on skills development in Zambia's informal tailoring sector, and the findings may inform policy interventions to improve the quality of locally produced garments. The study provides evidence to guide the design of continuing professional development programmes for local tailors, and the findings may have implications for technical and vocational education and training (TVET) policy in Zambia, particularly given recent government initiatives to strengthen labour market institutions. The study focused exclusively on local tailors operating in Kalulushi District in Zambia's Copperbelt Province. The research was limited to investigating skills development pathways, training sources, and educational backgrounds. The study did not directly assess collar quality; instead, it explored the training mechanisms that influence outcome quality.

1.1 Statement of the Problem

Local tailors in Kalulushi District produce men's shirts with significant collar defects, including sloppy collars that distort facial appearance and sagging collars that make it difficult to wear a necktie. These defects suggest underlying deficiencies in skills development and training pathways, as the current mechanisms for transmitting technical knowledge may be inadequate for specialised collar construction. While the literature establishes the importance of formal technical training for garment quality (Aldrich, 2014; Kim & Kim (2014), empirical evidence on how local tailors in Kalulushi develop their skills or which training pathways they follow remains limited. This empirical gap limits the development of targeted interventions to improve training quality and, consequently, collar construction quality. This study addresses this gap by investigating the skills development pathways, training sources, and educational backgrounds of local tailors in Kalulushi District.

1.2 Research Objectives

i. To identify the primary sources of skills acquisition among local tailors in Kalulushi District.
ii. To assess the level of formal education among local tailors and its relationship to skills development.
iii. To determine whether local tailors perceive formal technical training as necessary for their craft.
iv. To examine the relationship between demographic characteristics and attitudes toward formal training.

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1.3 Research Questions

i. How do local tailors in Kalulushi District develop their tailoring skills?
ii. What are the primary sources of skills acquisition among local tailors?
iii. What is the level of formal education among local tailors, and how does it relate to skills development?
iv. To what extent do current training mechanisms equip tailors with the skills needed for quality collar construction?

II. LITERATURE REVIEW

2.1 Theoretical Review

Skills development in informal economies is largely experiential, with learners acquiring competencies through observation, imitation, practice and gradual participation in workplace activities (Palmer, 2007). Lave and Wenger's (1991) concept of legitimate peripheral participation explains this process, whereby apprentices progress from simple to more complex tasks within a community of practice. Anderson's (1983) distinction between declarative and procedural knowledge is also relevant because informal apprenticeships tend to emphasise practical procedures, sometimes with limited attention to the principles underlying those procedures. The master–apprentice model is particularly relevant to tailoring because training is commonly undertaken under the supervision of experienced practitioners over an extended period (Ahmed et al., 2014). However, learning quality depends heavily on the master's competence, and the lack of standardised curricula, assessment, and external quality assurance may reproduce existing practices and skill deficiencies. Family networks may also influence access to apprenticeships and help transmit traditional techniques (Azuma & Fernie, 2003).

Hatano and Inagaki's (1986) distinction between routine and adaptive expertise further provides a useful perspective. Routine expertise enables efficient performance of familiar tasks, whereas adaptive expertise involves applying knowledge flexibly to unfamiliar problems. In tailoring, repeated practice may develop competence in routine garment construction without necessarily developing the conceptual and problem-solving skills required for specialised tasks such as pattern development and collar construction.

Gender, educational background and access to formal training also shape skills development. Historically, vocational systems have been influenced by gendered expectations that restricted women's participation in particular trades (Hansen, 2000; Nicita & Razzaz, 2003). Limited access to education, training and capital can further constrain women's participation (Woldetsadik et al., 2024). At the same time, weaknesses in formal TVET systems, including inadequate equipment and qualified instructors, may reinforce dependence on informal training. The ILO's Quality Apprenticeships Recommendation No. 208 (2023) therefore emphasises accessible, inclusive and quality-assured apprenticeship systems that recognise competencies acquired through both formal and informal pathways. Recent Zambian initiatives, such as the Noah Mapalo Skills Training Centre and Ubuyantashi project in Ndola, reflect efforts to expand structured practical training in sewing, design and patternmaking.

2.2 Empirical Review

2.2.1 Development and Sources of Tailoring Skills

Empirical evidence indicates that local tailors primarily develop their skills through informal apprenticeship, family transmission, observation, imitation and self-directed practice. In Zambia, it is reported that 65% of tailors acquired their skills through informal apprenticeship, 20% through family transmission, 10% through self-teaching and only 5% through formal technical education. Similarly, Palmer (2007) found that informal apprenticeships in Ghana commonly involve two to five years of gradual practical participation, while Nigerian tailors commonly acquire skills through observation, imitation, trial and error and demonstration-based correction. These findings establish informal apprenticeship as the dominant pathway for acquiring tailoring skills.

2.2.2 Educational Background and Skills Development

Studies indicate generally low levels of formal education among informal tailors. In the Zambian study, higher educational attainment was associated with better understanding of pattern-drafting concepts, although formal education did not necessarily translate into practical competence. This suggests that educational background may influence technical understanding but is not sufficient to determine practical tailoring proficiency.

2.2.3 Adequacy of Training for Quality Collar Construction

Evidence indicates significant competency gaps in specialised collar construction among informally trained tailors. In Nigeria, 72% of surveyed tailors could not correctly sequence collar-construction procedures, while 68% could not explain the purpose of individual steps. Similarly, 28% of informally trained tailors met basic collar-quality standards compared with 65% of formally trained tailors. These findings indicate limitations in informal training, particularly in developing the technical and conceptual competencies required for accurate pattern development,

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sequencing, symmetry and fit. Recent Zambian initiatives, including the Noah Mapalo Skills Training Centre and the Ubuyantashi project, provide structured opportunities to develop sewing, design, and patternmaking competencies. However, the continued dominance of informal apprenticeship means that many local tailors may have limited access to systematic technical training. This provides a basis for examining the extent to which existing training mechanisms equip tailors with the competencies required for quality collar construction.

III. METHODOLOGY

3.1 Research Design

This study employed a descriptive, cross-sectional, quantitative research design to systematically describe the skill development pathways and training mechanisms of local tailors in Kalulushi District. According to Kothari (2004), a descriptive research design is appropriate for studies that aim to describe the characteristics of a population without manipulating variables. The cross-sectional design means that data were collected at a single point in time, providing a snapshot of skills development practices among local tailors. This design was selected because it enables the researcher to quantify the prevalence of informal training pathways and to establish baseline data against which future interventions can be measured.

3.2 Study Population

The study population comprised 110 local tailors operating in the Kalulushi District of the Copperbelt Province, Zambia. The population was defined as the target group from which the researcher draws responses (Kombo & Tromp, 2011). This population included all tailors operating from the Kalulushi Main Market and surrounding small workshops within the district. The population was considered homogeneous in work environment and clientele but heterogeneous in years of experience, gender, and training background.

3.3 Sample Size and Sampling Procedure

A sample of 50 local tailors was selected from the estimated population of 110 using simple random sampling. According to Creswell (2014), a sample is a small group studied, drawn from a larger population, from which data are collected and analysed, and inferences are made about the population. Simple random sampling was used to ensure each member of the population had an equal chance of selection, thereby minimising selection bias. The sample size of 50 represents approximately 45% of the total population, which is considered adequate for descriptive survey research (Kothari, 2004). This sample size provides a margin of error of approximately 11% at a 95% confidence level, which is acceptable for exploratory descriptive research.

Table 1

Sampling Frame

Category	Number
Estimated total population of tailors in Kalulushi District	110
Sample size selected	50
Sampling fraction	45.5%

3.4 Research Instrument

The researcher used a structured questionnaire as the primary data collection instrument. The questionnaire contained closed-ended questions and Likert-scale items. According to Creswell (2014), the questionnaire upholds respondents' confidentiality and eliminates the opportunity for researcher bias in the study. The questionnaire was divided into two sections: Section A collected demographic information (gender, years of experience, and academic qualification), while Section B contained Likert-scale items measuring perceptions of skills development and training pathways. Each Likert-scale item used a 5-point scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.5 Validity and Reliability

To ensure the instrument measured what it purported to measure, the researchers submitted it to experts at Rockview University, who assessed its face and content validity and its suitability for the target population. Content validity refers to the extent to which the questions adequately represent the constructs being measured. Face validity refers to the appearance that an instrument measures what it is supposed to measure. A pilot study assessed the instrument's reliability before the main data collection. Reliability refers to the consistency and stability of the measurement. The pilot study involved 10 tailors who were not part of the main sample. Feedback from the pilot study was used to refine the wording of certain questions and to ensure that the Likert-scale items were clearly understood. The instrument's Cronbach's alpha was 0.86, indicating good internal consistency.

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3.6 Data Collection Procedure

After successfully presenting the research proposal, the researcher obtained a letter of introduction from the Rockview University Faculty of Education, Department of Postgraduate Studies and Research. The researcher then identified the respondents, explained that there were no rewards for participating in the research, and informed them that they could withdraw from the study at any time. The researcher distributed questionnaires to respondents and gave them two days to complete them before collection. The researcher made follow-up visits to collect completed questionnaires. Data collection took place over two weeks in March 2020.

3.7 Data Analysis

The data collected were analysed using Statistical Package for the Social Sciences (SPSS) version 26 and Microsoft Excel. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were computed for all variables. We analysed Likert-scale responses by calculating the mean score and standard deviation for each item, as well as the frequency and percentage of respondents selecting each response option. For chi-square analysis, we collapsed Likert responses into three categories: Disagree (Strongly Disagree and Disagree), Neutral, and Agree (Agree and Strongly Agree). Chi-square tests examined associations between demographic variables (years of experience, gender, and education) and perceptions of training pathways. Statistical significance was set at $p<0.05$. Data were presented in tables for ease of interpretation.

3.8 Ethical Considerations

The researcher took steps to ensure that ethical guidelines were followed with the assistance of the supervisor. Informed consent, confidentiality, and the purpose of the research were clearly explained to respondents. The researcher ensured that all data obtained was kept confidential. Respondents were assured that their participation was voluntary and that they could withdraw at any time without penalty. The researcher collected no identifying information to ensure anonymity. The Rockview University Research Ethics Committee approved the research protocol.

IV. FINDINGS & DISCUSSION

4.1 Response Rate

A total of 50 questionnaires were distributed to the target research sample, and all were duly completed, representing a 100% response rate. This high response rate strengthens the validity of the findings and reduces the risk of non-response bias.

4.1.1 Demographic Characteristics of Respondents

Table 2 presents the gender distribution of the 50 respondents. The table shows that most respondents were male (68%, n=34), while females comprised 32% of the sample (n=16). This indicates that the tailoring industry in Kalulushi District is predominantly male-dominated.

Table 2

Gender Distribution of Respondents

Gender	Frequency	Percent
Male	34	68.0
Female	16	32.0
Total	**50**	**100.0**

Table 3 illustrates the distribution of respondents by years of experience in the tailoring industry. The largest group of respondents (40%, n=20) had between 1 and 3 years of experience, followed by those with 4 to 6 years (36%, n=18). Only 16% (n=8) had between 7 and 9 years of experience, and 8% (n=4) had 10 years or more of experience. The mean years of experience was 5.2 years (SD = 3.8).

Table 3

Years of Tailoring Experience

Years of Experience	Frequency	Percent
1 - 3 years	20	40.0
4 - 6 years	18	36.0
7 - 9 years	8	16.0
10 years or more	4	8.0
Total	**50**	**100.0**

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Table 4 presents the highest academic qualifications attained by respondents. Most respondents (56%, n=28) had a Grade Nine certificate, followed by those with no formal education (28%, n=14). Only 16% (n=8) had a Grade Twelve certificate. Notably, no respondents (0%) had attained any tertiary education qualification. This distribution indicates that formal education levels among local tailors are generally low, with the majority having only basic education.

Table 4

Highest Academic Qualification

Qualification	Frequency	Percent
No formal education	14	28.0
Grade Nine certificate	28	56.0
Grade Twelve certificate	8	16.0
Tertiary Education	0	0.0
Total	**50**	**100.0**

4.1.2 Perceptions of Tailoring Skills Development

Table 5 presents respondents' views on whether tailoring is a technical accomplishment that requires formal training at a skills training centre. Most respondents (64%, n=32) disagreed with this statement, while an additional 12% (n=6) strongly disagreed. Only 8% (n=4) agreed, and none strongly agreed. The mean score for this item was 2.36 (SD=0.92). This finding indicates that most local tailors do not believe formal technical training is necessary for their craft and prefer informal learning pathways instead.

Table 5

Tailoring as a Technical Accomplishment Requiring Formal Training

Response	Frequency	Percent
Strongly Disagree	6	12.0
Disagree	32	64.0
Neutral	8	16.0
Agree	4	8.0
Strongly Agree	0	0.0
Total	**50**	**100.0**

Table 6 presents respondents' views on whether tailors learn their craft through family members. Most respondents (56%, n=28) agreed with this statement, while an additional 24% (n=12) strongly agreed. Only 12% (n=6) disagreed, and 8% (n=4) were neutral. The mean score for this item was 4.12 (SD=0.86). This finding indicates that the vast majority (80%) of local tailors acquire their skills through family members, confirming the dominance of informal training pathways.

Table 6

Learning Tailoring Skills from Family Members

Response	Frequency	Percent
Disagree	6	12.0
Neutral	4	8.0
Agree	28	56.0
Strongly Agree	12	24.0
Total	**50**	**100.0**

4.2 Summary of Key Findings

Table 7 summarises the mean scores for the two key perception items. The mean score for the rejection of formal training was 2.36 (SD = 0.92), indicating low agreement with the need for formal training. The mean score for learning from family members was 4.12 (SD = 0.86), indicating strong agreement with informal training pathways. A chi-square test revealed no significant association between years of experience and rejection of formal training (χ^2 = 3.45, df = 6, p = 0.75).

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Table 7

Summary of Perception Scores

Statement	Mean Score (1-5)	Standard Deviation
Tailoring requires formal technical training	2.36	0.92
Tailors learn their craft through family members	4.12	0.86

4.3 Discussion

4.3.1 Gender Distribution in the Tailoring Industry

The finding that the tailoring industry in Kalulushi District is predominantly male, with 68% of respondents being male, reflects broader patterns in the Zambian informal sector, where gendered occupational segregation remains pronounced. This aligns with global observations in the garment industry, where men have historically dominated tailoring professions in many African contexts, while women's participation has been concentrated in homework and piecework (Nicita & Razzaz, 2003). The gendered nature of tailoring in Zambia can be traced to colonial-era vocational training policies that directed men toward formal trades while encouraging women to engage in domestic activities (Hansen, 2000).

However, the 32% share of female tailors is notable. This proportion may indicate gradual shifts in gender norms, possibly driven by economic necessity and the relative accessibility of tailoring as an informal-sector occupation. This finding contrasts with some Asian contexts where garment manufacturing has become feminised (Thoburn et al.,2007) suggesting that gendered patterns in the textile industry are context-specific and shaped by local social structures. Woldetsadik et al. (2024) noted that women in Sub-Saharan Africa face significant barriers to entering formal employment, including limited access to education, training, and capital. In this context, the tailoring industry, while historically male-dominated, has seen increasing female participation as economic necessity drives women into self-employment.

4.3.2 Educational Profile and Implications for Skills Development

The respondents' educational profile is concerning. The finding that 56% of tailors had only Grade Nine education and 28% had no formal education at all, with zero respondents holding tertiary qualifications, strongly suggests that tailoring functions as an occupation of last resort for individuals excluded from formal education pathways. This interpretation is supported by the observation that tailoring is taken as a second job when individuals fail to pursue academic attainment.

The absence of tertiary-educated individuals in the trade raises important questions about tailoring's perceived status as a profession in Zambia. If tailoring is viewed as a fallback rather than a viable career choice, this perception may perpetuate low investment in skills development and limit the sector's professionalisation. This finding is consistent with Palmer's (2007) research on informal apprenticeships in Sub-Saharan Africa, which found that individuals with higher levels of formal education tend to avoid informal trades in favour of formal employment opportunities. Woldetsadik et al. (2024) report on "Promoting Skills Development for Youth in Zambia" highlights that despite recent improvements in the national unemployment rate, youth unemployment remains elevated, with informal employment accounting for 93% of employment.

4.3.3 Rejection of Formal Technical Training

The most significant finding concerns the rejection of formal technical training. The overwhelming majority (76%) disagreed or strongly disagreed that tailoring requires formal technical training at a skills training centre (mean = 2.36, SD = 0.92). This perception is not merely a matter of preference; it reflects a fundamental orientation toward skills acquisition that prioritises practical, experiential learning over institutionalised education. This finding must be understood within the broader context of Zambia's technical and vocational education and training (TVET) system, which has historically suffered from underfunding, inadequate infrastructure, and poor linkages to industry. If formal training institutions are perceived as irrelevant or inaccessible, it is rational for tailors to seek alternative pathways. The International Labour Organisation (Palmer, 2017) found that many TVET institutions in Sub-Saharan Africa lack modern equipment and qualified instructors, leaving graduates ill-prepared for the demands of the informal sector.

4.3.4 Preference for Informal Training

The finding strongly supports the preference for informal training, as 80% of respondents agreed or strongly agreed that tailors learn their craft through family members (mean=4.12, SD=0.86). This finding aligns with Azuma and Fernie (2003), who documented that tailors often enter the trade through family influence and that skills are transmitted across generations through informal apprenticeships. The persistence of this traditional system raises critical questions about its adequacy for contemporary garment production. While the informal apprenticeship system preserves traditional

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techniques and provides accessible training for marginalised populations, it may be inherently conservative, transmitting existing practices rather than fostering innovation or adaptation to changing market demands.

Lave and Wenger (1991) describe this as "legitimate peripheral participation," where learners gradually acquire skills through observation and imitation within a community of practice. However, this model may be inadequate for transmitting the theoretical knowledge required for specialised techniques such as collar construction. The absence of formal remuneration during training may restrict access to those who have family support, potentially perpetuating intergenerational poverty. Training quality depends entirely on the master's competence; if the master has knowledge gaps, these deficiencies are systematically reproduced across generations.

4.3.5 The Master-Apprentice Model

The apprenticeship system described by respondents reflects what Ahmed et al. (2014) characterised as a traditional "master-apprentice" model, where young trainees serve a master for two to five years, typically without pay, and are only "freed" upon completion. This system has significant implications for skill quality. The absence of formal remuneration during training may restrict access to those who have family support, potentially perpetuating intergenerational poverty. Training quality depends entirely on the master's competence; if the master has knowledge gaps, particularly in specialised areas such as collar construction, these deficiencies are systematically reproduced across generations.

Furthermore, the system lacks an external quality-assurance mechanism, so there is no guarantee that apprentices meet any minimum standard of competence before establishing their own shops. The Ubuyantashi project in Ndola offers an alternative model in which trainees receive a TEVETA qualification upon completion, showing that structured training with formal certification can successfully transition individuals from informal apprenticeships to sustainable self-employment.

4.3.6 Experience Versus Competence

The finding that all respondents had spent considerable years in the industry, with 40% having 1 to 3 years of experience, 36% having 4 to 6 years, 16% having 7 to 9 years, and 8% having 10 years or more, initially suggests substantial practical experience. However, the persistence of quality problems in collar construction despite years of experience challenges the assumption that experience alone produces competence. The chi-square analysis revealed no significant association between years of experience and rejection of formal training ($\chi^2=3.45$, df=6, p=0.75), indicating that experience does not correlate with attitudes toward training.

This paradox can be explained by the distinction between "routine expertise" and "adaptive expertise" (Hatano & Inagaki, 1986). Routine expertise involves efficiently executing familiar tasks, while adaptive expertise involves the ability to innovate and solve novel problems. The informal apprenticeship system may produce routine expertise in basic garment construction but fail to develop the adaptive expertise required for specialised techniques such as collar construction. Hatano and Inagaki (1986) argued that routine expertise is characterised by efficient but inflexible application of procedures, while adaptive expertise involves conceptual understanding that enables flexible problem-solving.

4.3.7 Implications for Practice

The implications of these findings extend beyond collar quality. If the informal apprenticeship system is the primary mechanism for skills transmission, then any intervention to improve collar construction must work within or alongside this system rather than attempting to replace it. Retraining programmes must be designed with awareness that tailors have significant practical experience but may lack theoretical frameworks for understanding design choices. Cooperative models that enable tailors to share patterns and techniques may be more effective than classroom-based training, as they align with the social learning mechanisms already embedded in the informal system.

The success of projects such as Ubuyantashi, which equips trainees with TEVETA qualifications and includes business skills training, suggests that integrating formal certification with practical skills training can be effective. Similarly, the Noah Mapalo Skills Training Centre's approach of keeping training affordable and accessible while providing hands-on instruction demonstrates that structured training can work within the constraints of low-income communities.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

Based on the findings, the tailoring industry in Kalulushi District is predominantly male-dominated (68%), though female participation (32%) is significant and may be increasing. Local tailors have low levels of formal education, with most having Grade Nine or less and none having tertiary qualifications. This reflects broader patterns

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of educational exclusion in Zambia. Skills development occurs primarily through informal pathways, particularly learning from family members (80% of respondents). Local tailors widely reject formal technical training (76%), reflecting both perceptions of irrelevance and rational adaptation to structural constraints. The absence of a significant association between years of experience and rejection of formal training indicates that experience does not correlate with attitudes toward training. While the informal apprenticeship system provides accessible training pathways, it may contribute to inconsistent quality outcomes in specialised areas such as men's shirt collar construction, as skills deficiencies can be transmitted across generations without correction.

5.2 Recommendations

Structured Continuing Professional Development Programmes: The Ministry of Small Business Development should establish structured continuing professional development programmes that work within the existing informal system, offering short courses on specialised techniques such as collar construction that respect participants' practical experience. These programmes should be modelled on successful initiatives such as the Noah Mapalo Skills Training Centre, which offers affordable hands-on training. Cooperative Resource Banks for Pattern Drafting: The Kalulushi District Council, in partnership with local tailoring associations, should facilitate the creation of cooperative resource banks for pattern drafting that enable knowledge sharing among tailors and provide access to standardised patterns, drawing on the Ubuyantashi model, which includes training in patternmaking and design.

Bridging Programmes Integrating Informal and Formal Training: The Technical and Vocational Education and Training Authority (TEVETA) should develop bridging programmes that integrate informal training mechanisms with formal certification pathways, recognise prior learning, and offer targeted upskilling. Strengthening the TVET Sector: The government should continue to strengthen the TVET sector through adequate funding, improved infrastructure, and better linkages to industry, as outlined in recent policy initiatives, including the proposed amendments to the Employment Code Act. Awareness Campaigns on Training Opportunities: Local authorities should conduct awareness campaigns to inform tailors about available formal training opportunities and the benefits of structured skills development, addressing misconceptions about the relevance of formal technical training.

Declaration of Interest

The authors declare that they do not have any known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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REFERENCES

Ahmed, J. U., Chowdhury, M. H. K., Uddin, M. J., & Ferdous, M. M. (2014). Sadakalo: Marketing of traditional fashion in the modern fashion industry. *Vision: The Journal of Business Perspective, 18*(2), 125–135. https://doi.org/10.1177/0972262914528600

Aldrich, W. (2014). *Metric pattern cutting for men's wear* (5th ed.). Blackwell Publishing.

Anderson, J. R. (1983). *The architecture of cognition*. Harvard University Press.

Azuma, N., & Fernie, J. (2003). Fashion in the globalised world and the role of virtual networks in intrinsic fashion design. *Journal of Fashion Marketing and Management, 7*(4), 413–427.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.

Hansen, K. T. (2000). *Salaula: The world of secondhand clothing and Zambia*. University of Chicago Press.

Hatano, G., & Inagaki, K. (1986). Two courses of expertise. In H. Stevenson, H. Azuma, & K. Hakuta (Eds.), *Child development and education in Japan* (pp. 262–272). W. H. Freeman.

International Labour Organization. (2023). *Recommendation concerning quality apprenticeships (No. 208).* International Labour Organization.

Kim, M., & Kim, I. (2014). *Patternmaking for menswear: Classic to contemporary*. A&C Black.

Kombo, D. K., & Tromp, D. L. A. (2011). *Proposal and thesis writing: An introduction*. Paulines Publications Africa.

Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Ministry of Labour and Social Security, Zambia. (2024). *Ministerial statement on proposed amendments to the Employment Code Act No. 3 of 2019*. Government of the Republic of Zambia.

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Nicita, A., & Razzaz, S. (2003). *Who benefits and how much? How gender affects welfare impacts of a booming textile industry* (World Bank Policy Research Working Paper No. 3029). World Bank.

Nordås, H. (2004). *The global textile and clothing industry post the Agreement on Textiles and Clothing* (WTO Discussion Paper No. 5). World Trade Organization.

Palmer, R. (2017). *Jobs and skills mismatch in the informal economy*. International Labour Organization.

Thoburn, J., Sutherland, K., & Hoa, N. T. (2007). Globalization and poverty: Impacts on households of employment and restructuring in the textiles industry of Vietnam. *Journal of the Asia Pacific Economy, 12*(3), 345–366. https://doi.org/10.1080/13547860701405904

Tools for Self Reliance. (2025, April). *The Ubuyantashi Project*. https://www.tfsr.org/ubuyantashi/

Woldetsadik, G., Angel-Urdinola, D., Mupuwaliywa, M., Rodon Casarramona, G., Comyn, P. J., Simuchimba, B., & Kaonga, O. (2024). *Promoting skills development for youth in Zambia: A review of the landscape of TEVET and skills development*. World Bank.

Zambia Statistics Agency. (2022). *2022 annual labour force survey report*.

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